Last Revised: 09/24/2001

Last Revised: 10/2001

E. Coli 0157:H7

E. coli **0157:H7** is an intestinal illness caused by a bacterium which can cause severe bloody diarrhea, anemia and - in some cases - kidney failure.

Who gets this disease?

Anyone is susceptible to this particular category of *E. coli* 0157:H7, but it most seriously affects young children and the elderly.

How is it spread?

This bacterium lives in a small number of healthy cattle. When the infected animal is slaughtered, the meat can become contaminated. The bacteria may also contaminate raw milk by being present on the cow's udder.

Eating contaminated food spreads e. coli 0157:H7 - most often undercooked beef, especially undercooked ground beef. Contaminated meat looks and smells normal. Drinking unpasteurized milk and swimming in or drinking sewage-contaminated water can also cause infection.

Infected persons having diarrhea can pass the bacteria from one person to another if hand-washing habits are not adequate. This is more likely to happen among toddlers who are not toilet trained. Young children usually continue to shed the bacteria in their stool a week or two following their illness.

What are the symptoms?

They vary from mild diarrhea to a bloody diarrhea with severe abdominal cramps and little or no fever. Vomiting may occur late in the illness. A small percent may develop hemolytic uremic syndrome, a condition that destroys the red blood cells and causes kidney failure. This is more likely to occur in children under five-years-of-age and the elderly, and may lead to death.

How soon do symptoms appear?

Symptoms appear 12-72 hours after exposure with the average being 48-hours.

Can a person have this disease without knowing it?

Yes. The organism is identified through stool culture testing. Usually symptoms disappear in a few days but the bacteria can remain in the intestinal tract for several weeks.

What is the treatment?

Seek medical help for identification of the organism. Usually the person is treated for diarrhea dehydration with fluid replacement.

How can the spread of this disease be prevented?

- **1.** Wash hands thoroughly after diapering and using the bathroom.
- **2.** Avoid eating undercooked beef, especially hamburg. Also, avoid drinking from unknown water sources and raw milk.

Who should be excluded?

Infected children and adults should be excluded from child care centers until their stool cultures are free of **E.** *coli* **0157:H7** on two consecutive specimens collected not less than 24-hours apart. If antibiotics have been given, the initial cultures should be obtained at least 48 hours after the last dose.

Reportable?

Yes. *E. coli* **0157:H7** is reportable by New Hampshire law.